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ABSTRACT

Social and economic forces in the post-war era have lead to an increased commitment by women of all ages to the labor force. In contrast, the labor force participation rate for men has declined. With women's continued predominance in the service sector and jobs lost in the traditionally male manufacturing sector of the U.S. economy, men and women are being affected differently by changes in macroeconomic trends. Within and across industries, women are still concentrated in clerical, sales, service, and light manufacturing jobs. Women made minor gains moving into management and the professions, but mostly into predominantly female categories and/or low-paying jobs. Although these gains have been somewhat higher for younger women, the evidence is inconclusive as to whether these advances will continue over their working lives and for succeeding generations. Even where occupational desegregation by sex has occurred, men and women in the same occupation continue to work in different establishments or departments and have different pay scales. Median incomes are inversely related to the percentage of females in an occupation; internal labor markets can be used as a lens to evaluate the extent of sex segregated career tracking and the disproportion of men at the top of the career ladder, even in female-dominated occupations. The wage gap has not declined despite women's increased education, experience, and tenure because women face different opportunity structures than do men. Policy options are recommended. Data are presented on 22 tables and figures. A 47-item list of references is included. (Author/ BJV)

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American Association of Retired Persons

Economic Status of *Women* in the Labor Market and Prospects for Pay Equity Over the Life Cycle

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Preface

This paper continues AARP's Public Policy Institute's research on older women workers which was initiated in the Institute's report "Employment Experience and Income of Older Women." In that paper, the past and current status of older women in the workforce was explored as well as the relationship between employment and retirement income. More detail on women's occupations and earnings over the life cycle is presented in this analysis as well as future projections and the outlook for pay equity. AARP's Women's Initiative has enabled the Institute to sponsor this research.

Executive Summary

Social and economic forces in the post-war era have led to an increased commitment by women of all ages to the labor force. In contrast, the labor force participation rate for men has declined. With women's continued predominance in the service sector and jobs lost in the traditionally male manufacturing sector of the U.S. economy, men and women are being affected differently by changes in macroeconomic trends.

Within and across industries, women are still concentrated in clerical, sales, service, and light manufacturing jobs. This has been stable for a 20 year period. Women made minor gains moving into management and the professions, but mostly into predominantly female categories and/or low paying jobs. Although these gains have been somewhat higher for younger women, the evidence is inconclusive as to whether these advances will continue over their working lives and for succeeding generations. Even where occupational desegregation by sex has occurred, men and women in the same occupation continue to work in different establishments or departments and have different pay scales.

Median earnings are also inversely related to the percentage of females in an occupation. In the 1980s, a more serious problem for women than receiving unequal pay for equal work is the lack of access to jobs with career ladders, from the entry level to every rung of the ladder. Internal labor markets can be used as a lens to evaluate the extent of sex-segregated career tracking and the disproportion of men at the "top" of the ladder, even in female-dominated occupations. It is argued that this approach is superior to focusing just on a person's human capital characteristics. The wage gap has not declined despite women's increased education, experience, and tenure because women face different opportunity structures than men. This is a major reason why women in the prime working years of 45-54 still earn only 61 cents for every dollar a man earns.

Projections show that it is mostly traditionally female industries, occupations, and jobs which will have the greatest growth in the next decade. It is also expected that six out of ten new entrants to the labor force will be women and will comprise an increasing percentage of the labor force in older age groups. These projections and the deteriorating economic position of women over the life cycle intensify the need for public policies that focus on the particular problems of older women. Policy options which are suggested include continued use of affirmative action in hiring and promotion, creating new career ladders through job restructuring, and improving compensation systems via "comparable worth" measures. Policies which support working women in their dual roles at home and work are also advocated.

Introduction

☐ A woman claims representative in a large insurance company finds that the male claims adjuster who started work the same time she did was just promoted to claims supervisor, and now earns more than the best-paid woman in the company.

☐ A licensed nurse practitioner would like to become a registered nurse, but is told that her years of experience and previous training will not earn her any credit towards the higher position.

☐ Over a cup of coffee in the lunchroom, a man hired to sell refrigerators and washing machines and a woman hired to sell clothes for the same department store wonder why no women are selling major appliances, when women are the primary consumers.

☐ An MBA who was determined to get a degree that would not consign her to a low-paying, female-dominated profession is frustrated that the only interviews she receives are for positions as personnel manager.

These examples represent the kinds of barriers to advancement women face at every stage of the life cycle. Because barriers still exist to pay equity and to full participation in all spheres of economic life, women and men have different labor force experiences and thus often approach retirement with different resources. The decisions made by a woman, by her employer, and by society early in her life shape her future opportunities. For this reason, the scope of this paper is the employment experience of all employed women — young and old, across industries and occupations.

In order to design and implement effective public policies for future generations of maturing women, we need not only a snapshot of women's current status but a picture of how much women's experience has and has not changed. Especially important is whether the experiences of young women entering the labor market today are markedly different from the experiences of their mothers and grandmothers. Young women's expectations of their socioeconomic roles have changed. They have a greater recognition of the amount of time they will devote to paid employment in their lifetimes. However, their position in the paid labor force is not changing as swiftly. Although increasing numbers of women are training for and entering traditionally male occupations and higher-paying, upwardly mobile jobs, most women of all ages are still segregated in female-dominated occupations, where paychecks are consistently lower.

Choosing a public policy or a set of public policies to help women's position in the economy throughout their life cycles is illuminated by an analysis of labor market statistics. Hence, this paper evaluates two sets of evidence. First, this paper analyzes data on women in the labor force by age, industry, occupation, and earnings in recent decades, as well as specific studies of women's experiences and opportunities. Given what has happened in the past, U.S. Bureau of Labor Statistics projections about industries, occupations, jobs, and labor force participants in the upcoming decade are reviewed. Only then is it possible to conclude with a discussion of the possibilities for improvement in the economic status of working women over the life cycle and assess which public policy avenues can be taken to achieve this end.

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Women's Employment Patterns

Women's Labor Force Participation

Women's and men's labor force participation rates have converged dramatically since World War II. The percent of women in the population who are working has steadily increased, while the percent of men in the labor force has steadily declined, although less drastically. Figure 1 shows these trends for over a quarter of a century. Women's labor force participation rates have risen from 36.9 percent in 1956 to 55.3 percent in 1986, an increase of 18.4 percent. Women reached a milestone in 1978; for the first time half of all women were working in the labor force. On the other hand, in 1986 men's labor force participation rate was 76.3 percent, down from 85.5 percent in 1956, a decline of 9.2 percent. Today, there is only a 21 percent difference in labor force participation by sex.

There are various social and economic reasons for these shifts in the labor force in the post-war era. First, stereotypes are changing. The working husband as "breadwinner" with a wife as a full-time homemaker is hardly the typical situation for a family in the 1980s. Both the husband and wife contributed to family income for 53 percent of all married couples in 1983. Almost half of these wage-earning wives worked year-round, full-time. Wives' earnings made the difference in moving families up in the middle class. The average earnings of couples where both spouses worked year-round, full-time in 1983 was $39,390, compared with an average of $28,570 for all married couples.[1]

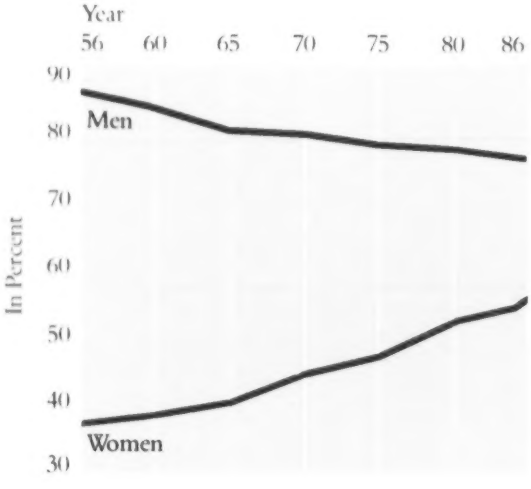
Furthermore, many families with one breadwinner are headed by women. Female-headed families constituted over 16 percent of all families in 1984, up from 13 percent in 1975.[2] Not surprisingly, the percentage of families headed by women is greatest when the family head is youngest. From ages 15-24, one out of every four families is headed by a young woman. Less expected is that the percentage of families headed by women beyond age 24 does not fall rapidly with age; for ages 25-34 and 35-44 over 17 percent of families are supported by women. In contrast, approximately one out of ten families whose head is 55-64 is headed by a woman. This increases again for those over 65, back up to 16 percent. (See Figure 2 on page 10.)

Overall, families headed by women had median incomes of approximately $13,000 in 1984. Figure 2 shows that families headed by women aged 14-24 received the least money income in 1984. The greatest annual median incomes of $18,317 and $17,659 were for families headed by women aged 45-54 and 55-64 respectively, although this was only approximately half of the median income for all families.[3] These women clearly work out of economic necessity, as do many women in two-earner families. More and more women are entering and *staying in* the labor force because of economic need.

There are two ways, statistically, to achieve an increase in the labor force par-

Figure 1

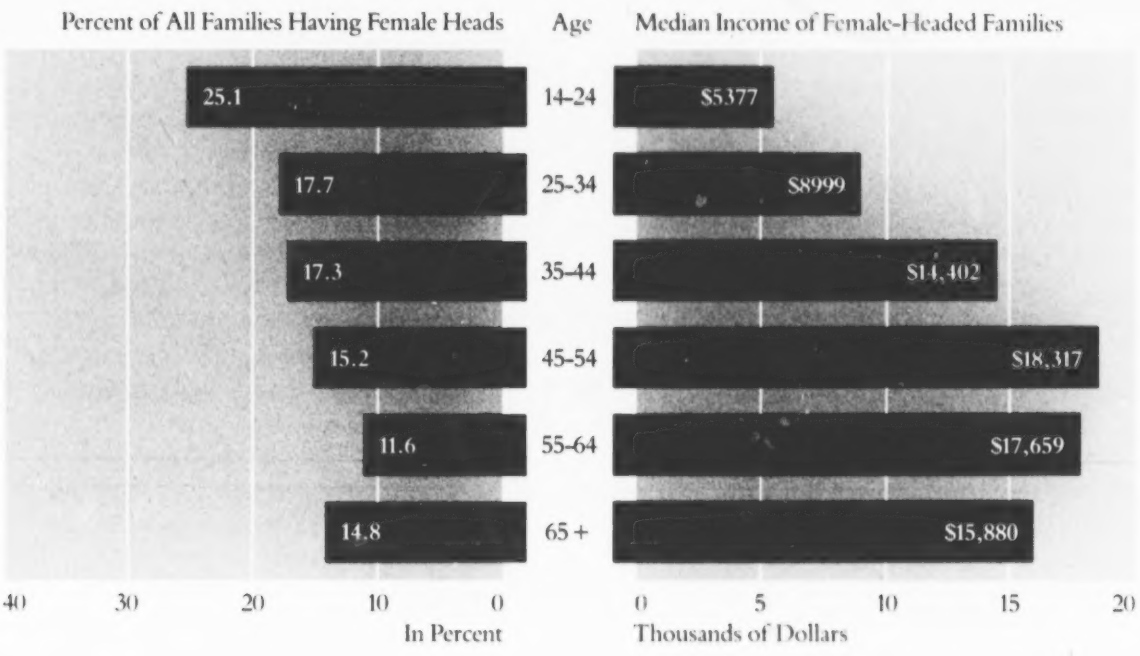
Labor Force Participation Rates of Men and Women, 1956-1986



Source: U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, January 1987, Table 2.

Figure 2

Number of Female-Headed Families as a Percent of All Families and Their Median Income by Age, 1984



Source: U.S. Department of Commerce, Bureau of the Census. *Money Income of Households, Families, and Persons in the United States: 1984*, Series P-60, No. 151, April 1986.

ticipation rate: either there are many new entrants to, or there are far less exits from, the labor force. World War II necessitated an increased role for women in paid employment; the post-war economic boom, especially in the service sector, encouraged them to stay in the labor force. Whereas motherhood led many women to temporarily drop out of the labor force in the 1950s and 1960s, in the 1970s and 1980s motherhood no longer deterred women from the labor force. Women aged 25–44 are staying in the labor force, increasing their longevity and commitment to their work and careers, even if they have children. Thus, women's labor force participation rates are swelling less and less because of new entrants and more because of fewer exits.

This is evidenced by the changing labor force participation rates of women throughout the life cycle. For example, Table 1 (see page 13) shows the labor force participation rates of women by age group in 1975 and 1986. Overall, the labor force participation rate for women has increased from 46.3 percent to 55.3 percent during the decade, an increase of 9.0 percent. The only age category which had a slight decline in labor force participation was women 65 and over. The largest increases in participation have come from women who are 25–44 years old. The rise in the labor force participation rate for women 25-34 years of age was 16.7 percent from 1975 to 1986, and the rise for women 35–44 years old was 17.3 percent. This is almost twice the percentage increase for working women in all age groups.

There was also a sizeable increase from 1975 to 1986 (11.3 percent) in labor force participation among mature women, aged

Table 1
Labor Force Participation Rates of Women by Age, Selected Years

Age *(in years)*	1975	1986	Change
Total 16+	**46.3%**	**55.3%**	**9.0**
16-17	40.2	43.7	3.5
18-19	58.1	62.3	4.2
20-24	64.1	72.4	8.3
25-34	54.9	71.6	16.7
35-44	55.8	73.1	17.3
45-54	54.6	65.9	11.3
55-64	40.9	42.3	1.4
65+	8.9	7.4	−1.5

Sources: U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, January 1987, Table 3; and U.S. Department of Labor, Employment and Training Administration, *Employment and Training Report of the President, 1982*, Table A-5.

45-54. In 1960, on the eve of the dramatic social changes redefining women's family and work roles, labor force participation was *higher* for mature women than any other age group. However, by 1970, society's promise of personal freedom and greater employment opportunities particularly influenced younger women so that their labor force participation once again surpassed that of mature women.[4] Although women have become more committed to the labor force, they are more likely than men to work part time.[5]

Where Do Women Work?

Economic need was one of the factors which motivated women to enter and stay in the labor force. Another was the rising service sector industries in the post-war era which beckoned for women's participation in paid work. With the exception of factory jobs available during World War II and certain manufacturing industries such as textiles and apparel, doors were often closed to them in the predominantly male, manufacturing sector.

Figure 3 (see page 15) shows the distribution of working women by major industry in 1950 and 1986. The largest proportion of working women in both years was employed in the service sector. In 1950, 36 percent of women worked in services and seven percent more, or 43 percent, worked in service industries in 1986. In fact, the categories of services and wholesale and retail trade account for two-thirds of employed women in both 1950 and 1986, demonstrating not much of a shift in industrial sex segregation over time. Additionally, women's relative presence in other industries such as public administration, transportation and public utilities, finance, insurance, and real estate, remained fairly constant over the 36-year period.

The largest change in the 36 years shown in Figure 3 is the decline of women working in manufacturing industries, from number two in total women employed in 1950 (26 percent) to number three in total women employed in 1986 (14 percent) — almost cut in half. This shift mirrors the changes in the macro economy since the 1950s. There has been much media attention on the men who have been affected by the decline in the manufacturing sector's share of total U.S. employment and the relatively fewer blue-collar jobs in industries such as automobile and steel manufacturing. Less attention has been paid to the overseas movement of textile and apparel manufacturing, which has affected thousands of working women. The 12 percent decline in the distribution of women in manufacturing from 1950 to 1986 was mostly picked up by the increasing concentration of women in service and trade industries; in contrast, the service sector did not absorb men by such a large percentage. This economy-wide shift is an important factor in men's declining labor force participation.

Within and across industries, women are concentrated in a limited range of occupations. Nearly half of employed women are in occupations where at least 80 percent of

the workers in the occupation are women.[6] The single largest occupational category of women workers in 1986 was administrative support, including clerical, numbering 29 percent of all working women. Thus, roughly one out of every three working women in the United States is a clerical worker and nearly one out of two is a member of either the administrative support or service worker occupational group. (See Figure 4 on page 17.)

Figure 4 demonstrates the constancy of women's predominance in clerical work as this proportion was exactly the same in 1957. Since professional and technical occupations were lumped together as one category in 1957, by combining these 1986 categories we find there was a growth in these occupations from 11 to 17 percent of working women. Much of this change represents the expansion of teaching, nursing, health technician fields, and other female-dominated professions and semi-professions. Additionally, Figure 4 shows that the number of women workers in managerial and sales categories roughly doubled in the 29-year period, from five to ten percent and from seven to 13 percent, respectively.

Two major occupations that women have moved out of between 1957 and 1986 are important because they signify broader macroeconomic shifts. First is operators and laborers, where there was a greater than 50 percent reduction of women over the period. As was shown earlier, during the observed period women moved out of factories and into offices, with the declining manufacturing sector and the rising service sector. The second is private household workers, where ten percent of women were employed in 1957. This was no longer a major occupational category in 1986, but a small subcategory of service workers — less than 2 percent of all working women and merely one out of ten of all female service workers. This trend has especially affected generations of black women, as the daughters of household workers have moved into office work, health services, and service jobs. Since 1957, women not only left full-time work in their own homes but in other people's homes as well.

Although there have been some changes over the last two decades, occupational segregation by sex is still rampant. In order to measure occupational sex segregation, social scientists use a "segregation index," which was first developed and used for interpreting racial segregation in American cities. The index ranges between zero and 100. The index is zero when occupational representations by sex are equal for all occupations throughout the economy.[7] For example, if 40 percent of the labor force were women, women would be 40 percent of auto workers, 40 percent of word processors, 40 percent of dentists, and 40 percent of artists, etc. When the index is greater than zero, it represents the percentage of persons who would have to change to an occupation in which they are underrepresented in order for the index to reach zero. Table 2 (see page 16) provides data for the index of segregation, which is based on the decennial census, and the absolute change in the index from 1970 to 1980.

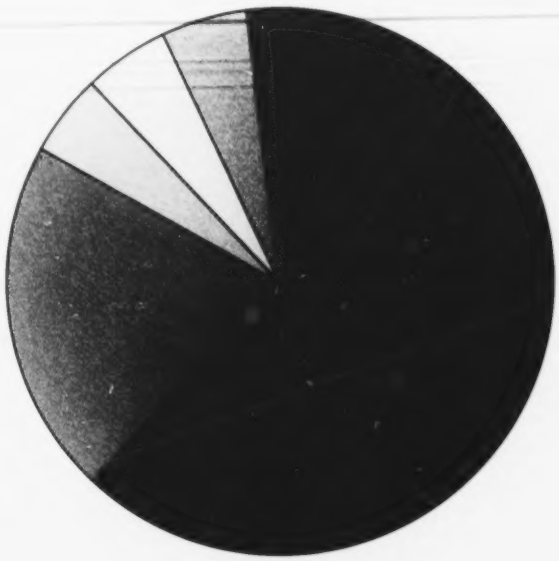
In 1980, 59.2 percent of all workers would have to move before the segregation index would reach zero, that is, for there to be no occupational segregation by sex. The good news is the segregation index for all the major occupational groups fell from 67.7 in 1970 to 59.2 percent in 1980, a decline of 8.5 percent. Thus, 8.5 percent fewer people, both men and women, would have to change occupations in 1980 than in 1970 for all occupations to be completely integrated. The largest declines in the index of segregation over the decade were in the managerial and professional specialty and in the service occupations, with declines of 12.6 and 12.5 respectively. Therefore, to the extent that occupational integration increased in the last decade, it did so the most in the rapidly expanding white-collar occupations.

Figure 3

Percent Distribution of Employed Women 16 Years and Older by Major Industry Group, 1950 and 1986

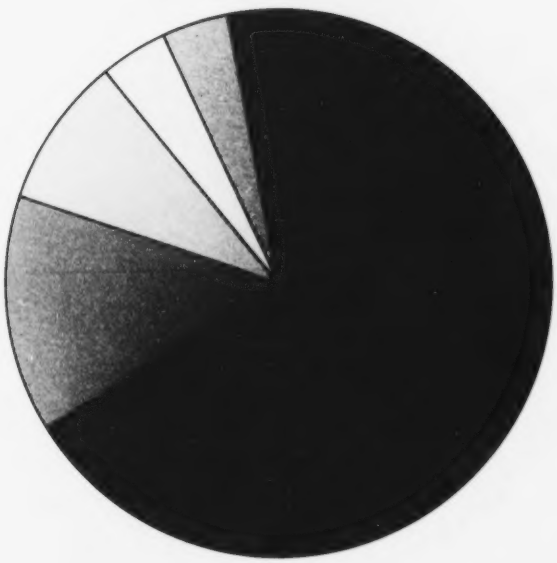
1950

- Services 36%
- Manufacturing 26%
- Trade 21%
- Public Administration 5%
- Finance, Insurance, and Real Estate 5%
- Transportation and Public Utilities 5%
- Other 1%



1986

- Services 43%
- Trade (Retail & Wholesale) 23%
- Manufacturing 14%
- Finance, Insurance, and Real Estate 9%
- Transportation and Public Utilities 4%
- Public Administration 4%
- Other 3%



Due to rounding, sums of pie charts may not equal 100 percent.

Note: In 1986, "Other" is mining, construction, and forestry and fishing. In 1950, "Other" is mining and construction.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Unpublished tabulations from the 1986 Current Population Survey; Elizabeth Waldman and Beverly J. McEaddy, "Where Women Work — an Analysis by Industry and Occupation," *Monthly Labor Review*, vol. 97(5), May 1974.

Aside from advancements by women in these two categories, the index has not changed much from 1970 to 1980. However, this segregation index utilizes broad occupational categories. Individual male- and female-dominated occupations are contained in each broad category. It is far better, when possible, to view the changes in occupational distributions of men and women by as disaggregated an occupational level as possible.

For example, the aggregate index reflects that women made gains into management and the professions in the 1970s, confirming the progress noted in Figure 4. But looking closer at more *specific* categories in the professions without the aggregative index yields different results. The number of women lawyers has doubled in the last decade, from nine percent of women in 1976 to 18 percent in 1986. In 1963, only four percent of students in law school were women. That number skyrocketed to 20 percent in 1973 and doubled again to 41 percent in 1986. Also in 1986, 38 percent, or nearly two out of five, of all law degrees went to women.[8] In 1985, women also represented 15.2 percent of all new PhDs awarded in economics, up from 9.6 percent in 1975.[9] However, the majority of female professional workers predominate in two relatively low-paying sex-segregated categories, teachers and nurses.[10] Additionally, women in management are clustered as office managers, as building managers and superintendants, and as health administrators.[11]

There are many cases in which there has been occupational desegregation but not job desegregation. That is, women and men in a specific occupation may often work for different establishments, sometimes in different industries. An example in the professions is pharmacists. Many women became pharmacists in the 1970s, but are concentrated in hospitals, whereas men are mostly in retail stores (where pay scales are higher).[12] An example in blue-collar work is bus drivers. Between 1972 and 1985, female motor vehicle operators more than doubled in number, but much of this increase was for school bus drivers, who worked part time and received low pay. This contrasts with male transportation operatives who tend to have more lucrative jobs as, for instance, city bus drivers.[13]

To illustrate sex segregation by specific occupation using extreme examples, in 1981 only 3.2 percent of engineers, 1.2 percent of carpenters, and 0.2 percent of auto mechanics were women. Yet 98.2 percent of secretaries and stenographers, 87.3 percent of health

Table 2
Index of Segregation by Occupational Group, 1970 and 1980

Major Occupational Group	1970	1980	Change 1970-80
Total Employed	**67.7**	**59.2**	**−8.5**
Managerial and professional specialty	55.5	42.9	−12.6
Technical, sales, and administrative support	63.9	57.8	−6.1
Service occupations	67.6	55.1	−12.5
Farming, forestry, and fishing	38.0	31.0	−7.0
Precision, production, craft, and repair	56.7	53.6	−3.1
Operators, fabricators, and laborers	57.6	52.9	−4.7

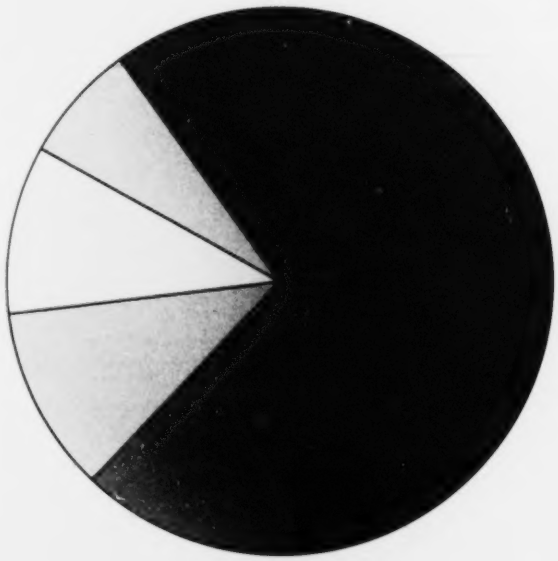
Note: A negative change from 1970 to 1980 means a reduction in the segregation index by occupation, or more integration.
Source: U.S. Department of Commerce, Bureau of the Census, *Women in the American Economy,* by Cynthia M. Taeuber and Victor Valdisera, Current Population Reports, Series P-23, No. 146, 1986, Table 12.

Figure 4

Percent Distribution of Employed Women 16 Years and Older by Major Occupation, 1957 and 1986

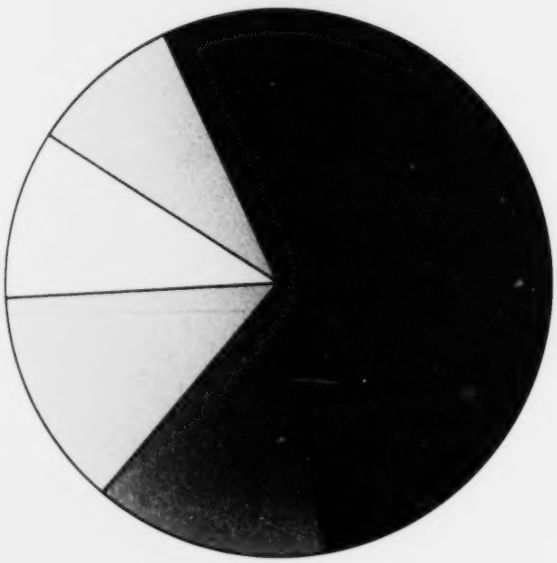
1957

- Clerical 29%
- Operators and Laborers 20%
- Service 13%
- Professional and Technical 11%
- Private Household 10%
- Sales 7%
- Managers, Officials and Proprietors 5%
- Farmers, Farm Managers and Laborers 5%
- Craftsmen and Foremen 1%



1986

- Administrative Support, including Clerical 29%
- Service 18%
- Professional Specialty 14%
- Sales 13%
- Executive, Administrative & Managerial 10%
- Operators, Fabricators & Laborers 9%
- Precision Production, Craft & Repair 3%
- Technicians and Related Support 3%
- Farming, Forestry & Fishing 1%



Due to rounding, sums of pie charts may not equal 100 percent.

Notes: Beginning in 1983, the occupational classifications in the Current Population Survey were changed. The categories for 1957 do not directly correspond with those for 1986. In 1957, four separate categories were listed as two categories ("farmers and farm managers" with "farm laborers;" and also "operatives" with "nonfarm laborers"). Two separate categories from 1986 ("professional specialty" and "technicians and related support") were one category ("professional and technical workers") in 1957.

Sources: U.S. Department of Labor, Bureau of Labor Statistics, Unpublished tabulations from the 1986 Current Population Survey; and U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, May 1960, Table SA-15.

service workers (excluding physicians and dentists), and 87.0 percent of bookkeepers were women.[14] Overall, 80 percent of working women have been and continue to be crowded into poorly paid clerical, sales, service, and factory (light assembly) jobs. Although aggregate occupational sex segregation has declined, traditionally female and traditionally male occupations and establishments still remain bastions of female versus male employment.[15]

Occupational Segregation and Distribution Over the Life Cycle

Some economists and policy makers have argued that the aggregate measures of segregation do not adequately reflect important changes in women's representation in nontraditional jobs in the recent decade or two. Specifically, it is argued that the greatest advances have been made among younger women making their initial career choices. If women continue to make such choices in the next few decades, these gains will be extended permanently across the life cycle.[16] Therefore, if we break down occupational segregation into age groups showing, in a sense, different stages in one's career, we can get a more appropriate measure of where women work and where they may work throughout their lives.

When we look at the available data, there has been a greater integration by sex in nontraditional, high-paying, white-collar occupations for younger cohorts. All other major occupational categories show no corresponding declines in occupational sex segregation either for relatively younger or relatively older women. While younger women have been entering more male-dominated professions, the overall number of women in the labor force has risen at the same time. Thus, the percentage of women in the labor force has swollen, and not all of these women, young or old, have entered nontraditional occupations. The overall *distribution* of where most of these women work is the same for younger and older cohorts by major occupational category and specific occupation with few exceptions.

Table 3 (see page 19), for example, shows the percentage of women workers by specific occupation and age group in 1986. The percentage of younger executives, professionals, technicians, and sales workers who are female is greater than the percentage of older workers in these same occupations. Presumably more younger women relative to older women are becoming managers, as well as engineers, doctors, lawyers, finance and commodities sales workers. Yet, the percentage of the traditional teaching and health assessment and treating professions such as nursing which are female also rises for the younger cohorts. Therefore, the percentage female in these relatively higher paying professions and semi-professions does not tell us whether younger women are breaking down barriers or are entering both traditional and nontraditional occupations.

In contrast, in the low-paying service occupations in Table 3 such as food and health services, we actually find that the percent of the occupation which is female is greater for older women, between the ages of 45–59 and 60 and over than for younger women aged 20–34. Additionally, for blue-collar workers in the production, craft, operative, fabricator, or laborer categories, the percentage female rises with age, presumably because of the diminishing opportunities for younger women and men in these occupations due to shifts in the macro economy.

In sum, although there has been some integration in nontraditional occupations, three out of five working women aged 20–34 years are in sales, clerical, and service occupations. Over half of working women aged 35–44 are in these same occupations. Thus, the occupational patterns of younger and older women are not as different as one might expect. Given the massive influx of

Table 3

Percent Female in Occupational Category by Age, 1986

	Percent Female of Total Employed in Occupation By Age			
	20-34	35-44	45-59	60+
Executive, administrative, and managerial	**44.1**	**36.5**	**31.5**	**27.7**
Executive/administrative, except public	38.7	31.4	28.7	26.4
Management related occupations	53.8	43.2	40.2	27.7
Professional specialty	**52.3**	**50.6**	**45.5**	**36.7**
Engineers	10.3	3.4	2.8	0.2
Math and computer scientists	40.6	37.3	23.5	27.3
Natural scientists	28.3	22.1	14.6	0.0
Health diagnosing occupations	24.0	15.0	9.7	3.3
Health assessment and treating	84.7	84.3	76.7	79.3
Teachers, except college and university	75.8	72.3	72.3	71.1
Lawyers and judges	28.6	14.7	8.9	4.9
Technical and related support	**48.6**	**49.2**	**40.7**	**39.8**
Health technologists/technicians	83.3	85.5	85.0	88.6
Engineering/scientific technicians	21.6	20.0	21.4	12.8
Sales	**49.7**	**41.8**	**42.9**	**40.7**
Finance and business	45.7	40.8	38.5	28.4
Commodities, except retail	22.8	18.8	11.8	7.9
Retail and personal	65.6	68.1	71.2	66.9
Supervisors and proprietors	34.7	28.6	27.6	23.5
Administrative support, including clerical	**79.9**	**81.8**	**81.0**	**77.9**
Supervisors	61.7	59.8	55.8	61.1
Computer operatives	67.1	68.9	72.1	69.6
Secretaries/stenographers/typists	98.4	98.6	98.3	95.5
Financial records processing	89.7	92.9	92.0	87.1
Service	**59.5**	**63.8**	**64.1**	**61.5**
Private household	95.1	97.2	96.5	96.0
Protective services	13.7	10.8	8.9	10.3
Food services	60.0	74.3	77.4	78.0
Health services	74.9	90.8	93.8	94.6
Cleaning and building services	38.2	49.2	46.1	38.5
Precision production, craft, and repair	**7.8**	**8.9**	**9.3**	**10.4**
Mechanics and repairers	3.5	3.9	3.1	2.7
Construction trades	2.1	2.1	1.7	1.8
Operators, fabricators, and laborers	**22.7**	**29.2**	**30.4**	**29.5**
Machine operators, assemblers, and inspectors	35.6	42.8	46.0	48.7
Motor vehicle operators	10.0	13.0	12.6	8.4
Handlers and laborers	14.6	22.6	23.5	20.2
Farming, forestry, and fishing	**14.6**	**20.0**	**19.6**	**11.6**

Source: U.S. Department of Labor, Bureau of Labor Statistics, Unpublished tabulations from annual average industry and occupation tables, December 1986, Table 4.

women into the labor force, it is not surprising that many occupations would show a higher percentage female for younger age groups. But out of the whole size of the increased "pie" of total women employed in each age cohort, it is more significant to look at the relative "slices" of the pie, that is, the distribution of women employed in various occupations. Figure 5 (see page 21) presents such data for four age categories: 20–34 years, 35–44 years, 45–59 years, and 60 years and over.

What is remarkable from Figure 5 is the relative constancy of women's distribution among occupations across the life cycle. For example, approximately 30 percent of working women in any age group work in clerical occupations. Despite efforts to encourage women to enter and seek training for male-dominated blue-collar occupations, the distribution of women craft workers and operators/laborers varies little by age group, averaging 2.5 and 9.2 percent respectively. Yet more younger women, as a percent, than older women are professional and technical workers: 5.2 percent more aged 35–44 versus age 45–59. Nevertheless, we know from Table 3 that these women are entering both male and female professional and technical specialties. Women executives and administrators also comprise more of the younger age cohorts, but not much more: 9.5 percent for 20–34 years, 11.3 percent for 35–44 years, 10.3 percent for 45–59 years, and 8.9 percent aged 60 and above. However, 4.6 percent fewer women aged 20–34 are professional workers compared with women aged 35–44. This result is somewhat puzzling and disconcerting. Could this small percentage among the youngest age group mean professional opportunities for women are drying up? Or, if women are not trained for or promoted into professional positions until they reach their mid-thirties, would we expect to find this same pattern of occupational distribution over the life cycle in earlier years?

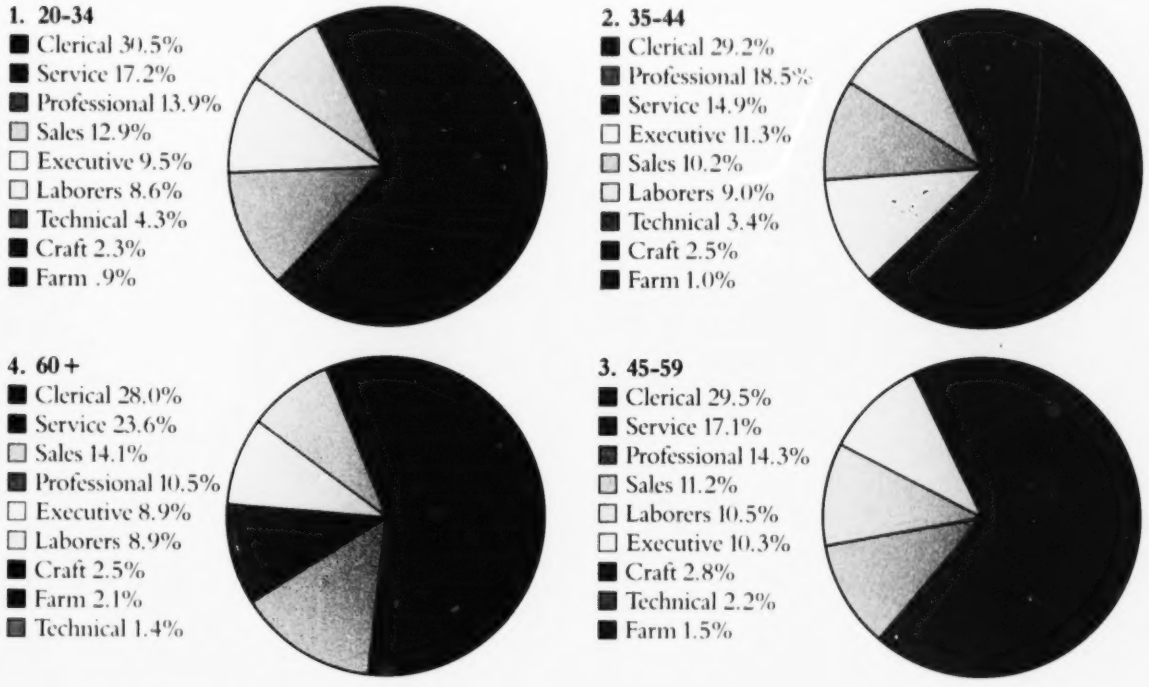
Whereas Figure 5 allows us to view the occupational distribution of women working in 1986 by age cohort, Table 4 (see page 21) enables us to hypothetically compare the progress of an age cohort in 1975 and 1986. But we should be cautious to not make absolute comparisons across years; this is not longitudinal data following women throughout their lives. However, we can use such data to see if the pieces of the age cohort pies going to each major occupation were similar in 1975 and 1986. In other words, we can assess occupational patterns in the two years.

As shown in Table 4, the age cohort occupational pattern in 1975 compared with 1986 is similar. The distribution of women in craft and operative occupations is relatively constant across age groups. The percentage of women who are service and sales workers increases with age. But, unlike 1986, the proportion of working women who are executives also increases consistently with age in 1975, indicating that the movement of younger women into managerial positions *is* a relatively recent phenomenon. If this phenomenon continues, we could expect an increase in women managers across the life cycle at a higher absolute level in the next several decades.

Professional and technical workers, however, pose a different phenomenon than managers. The pattern of a higher percentage of professional and technical workers in the younger age groups is similar for both years; in 1975, though, the greatest distribution of these women is in the youngest cohort whereas in 1986 they are in the next cohort, aged 35–44. This raises two questions. Did the 20.4 percent of women professional and technical workers who were aged 20–34 in 1975 stay in their fields so that at ages 35–44 in 1986, they were distributed similarly, 21.9 percent? Furthermore, has the entrance of women into professional occupations in the 1980s dropped relative to the 1970s since only 18.2 percent of women aged 20–34 were

Figure 5

Percent Distribution of Employed Women by Age and Occupation, 1986



Due to rounding, sums of pie charts may not equal 100 percent.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Unpublished tabulations from the 1986 Current Population Survey.

Table 4

Percent Distribution of Women by Major Occupation and Age, 1975 and 1986

	1975				1986			
Occupation	20-34	35-44	45-59	60+	20-34	35-44	45-59	60+
Executive/administrative	4.0	6.1	7.2	8.2	9.5	11.3	10.3	8.9
Professional/technical	20.4	17.3	13.8	12.9	18.2	21.9	16.5	11.9
Sales	5.9	6.1	7.2	9.8	12.9	10.2	11.2	14.1
Clerical	39.7	34.0	32.7	24.3	30.5	29.2	29.5	28.0
Service	17.7	20.4	20.8	30.8	17.2	14.9	17.6	23.6
Craft	1.4	1.8	1.8	1.4	2.3	2.5	2.8	2.5
Operators/laborers	11.4	14.1	15.5	11.4	8.6	9.0	10.5	8.9
Farming	.2	.3	.5	1.4	.9	1.0	1.5	2.1

Note: The Bureau of Labor Statistics changed its occupational classifications in 1983. Several categories were combined in this graph to obtain comparable categories for the two years compared.
Sources: U.S. Department of Labor, Bureau of Labor Statistics, Unpublished tabulations from annual average industry and occupation tables, December 1986, Table 4 and from Current Population Survey base tables, 1975, Table 23.

professional and technical workers in 1986? It seems that, first, women in the 1970s trained for and entered the professions in their twenties rather than in their thirties. Second, it also appears that the women in their twenties in the 1980s are less likely to be professionals, yet more likely to be executives. But, again, we must be extremely careful in making these comparisons across years because we are not measuring the same workers year by year.

What we can say about Figure 5 and Table 4 is that young women are still not making tremendous inroads into male bastions relative to their increasing participation in the labor force. We see some progress in terms of occupational integration and the distribution of women who are executives and managers, but this occupational category represents a small minority of working women, only ten percent of all working women in 1986. (See Figure 4.) To gauge women's progress over the life cycle most accurately, it is best to compare the distribution of women on as disaggregated level as possible — by as specific an occupational category as available.

It is difficult to compare the occupational distribution by specific occupational category over time because the economy, the composition of the labor force, and hence the definition of occupational categories and specific occupations changes. However, Table 5 (see page 23) contains data comparing the distribution of women by age group and specific occupation for 13 occupations whose titles were exactly or roughly the same in both 1975 and 1986. The data call into question the hypothesis that occupational sex segregation (and the wage gap) will decrease over time as the younger women who have entered better paying male occupations in the last decade will progress in their careers and as younger women today follow in their footsteps.

Table 5 shows that in 1986 slightly higher percentages of women at the beginning of their work lives (aged 20-34 years) are entering nontraditional fields such as engineering and health diagnosing professions (physicians and dentists). However, this is equally true in many traditional professions and semi-professions such as teachers and "other health" fields (including nursing and health technicians). Even though younger women are entering the professions in greater absolute numbers, they are entering traditional professions more than nontraditional professions. In fact, the traditional fields account for much higher percentages; 6.4 percent of young women aged 20-34 years are in health professions and 4.4 percent are in teaching compared to less than half of a percent who are engineers or physicians.[17] This is substantiated for two additional professions for which comparable data was not available for 1975. The percentage of women lawyers and judges distributed in the first two age cohorts is only .3 percent and is .1 percent for the two older cohorts. For natural scientists, the comparable figures are .2 percent for ages 20-34 and 35-44, .1 percent for ages 45-59, and zero percent for ages 60 and up.[18] Furthermore, young women are making only relatively minor inroads into nontraditional blue-collar fields such as protective services or motor vehicle operators. Both of these occupations have the same or an even greater proportion of women in an older age category as well.

Additionally, the female-dominated retail/personal sales and food service occupations in 1986 contain a relatively larger percentage of younger *and* older women. (See Table 5.) Younger women are not moving into the male-dominated subcategory of finance and business sales in any great numbers either. It is the two middle age cohorts that have the greatest percentages of women, although in absolute terms it is only roughly 2.1 percent of working women.[19] The distribution of women in cleaning services and private household work increases consistently throughout the life cycle, with the greatest percentage of women in these occupations

Table 5

Percent Distribution of Women by Selected Occupation, 1975 and 1986

	20-34 years		35-44 years		45-59 years		60+ years	
Occupation	1975	1986	1975	1986	1975	1986	1975	1986
Engineers	.1	.4	0.0	.1	0.0	.1	0.0	.1
Teachers	8.6	4.4	6.1	12.3	5.2	3.5	5.4	3.5
Health diagnosing	.3	.3	.3	.3	.2	.2	.2	.1
Other health	5.2	6.4	4.4	6.2	3.5	5.1	2.5	3.3
Retail/personal sales	4.2	8.0	4.6	5.0	5.9	6.3	8.4	9.5
Secretaries/steno/typists	15.8	10.3	12.3	10.0	11.2	10.3	7.6	9.1
Private household	1.5	1.2	3.1	1.2	3.5	2.1	10.2	4.8
Cleaning service	1.3	1.8	2.2	2.4	3.2	3.4	4.5	4.2
Food service	5.9	6.5	6.6	4.2	6.8	5.4	6.5	6.5
Health service	4.6	3.5	4.8	3.1	4.0	3.5	4.7	3.5
Protective service	.2	.5	.3	.4	.3	.3	.2	.5
Motor vehicle operators	.2	.7	.3	.9	.2	.7	.2	.6
Nondurable goods operators	5.0	3.1	6.0	3.4	6.6	4.0	4.8	3.1

Note: "Other health" includes the categories of health assessment and treating, and health technologists and technicians. Percentages will not equal because these are *selected occupations*.

Sources: U.S. Department of Labor, Bureau of Labor Statistics, Unpublished tabulations from annual average industry and occupation tables, December 1986, Table 4; and U.S. Department of Labor, Bureau of Labor Statistics, Unpublished tabulations from the 1975 Current Population Survey base tables, 1975, Table 23.

being aged 60 and over. The proportion of women in secretarial work, health services, motor vehicle operators, protective services, or nondurable goods production does not show a particular pattern of change.

In 1975, the distributional patterns at various stages of the life cycle among specific occupations resemble the patterns in 1986. When selected specific occupations are examined, the promised progress for younger women in male-dominated occupations is, in fact, minuscule. There just are not enough women, as a percent, entering or working in male-dominated occupations to show a substantial change in the occupational distribution of women by age in 1986.

The slight differences between the two years do not change the overall conclusions. The two occupations showing negligibly different patterns are retail/personal sales and secretaries/stenographers/typists. The proportion of women in 1975 who were retail and personal sales workers doubled over the life cycle, from 4.2 percent in the youngest age group to 8.4 percent for the oldest age group. (See Table 5.) Not as many young women were sales workers in 1975 as in 1986. In 1975, over twice as high a percent of younger women aged 20-34 than older women aged 60 and above were in secretarial work. The percentages of clerical workers by age cohort in 1986 is stable. These results utilizing specific occupations do not add any more credence to the hypothesis regarding the presumed progress of younger cohorts over time.

Breaking down where women work by age category yields antithetical conclusions. On the one hand, there has been increased integration of high-paying white-collar occupations as manifested by the higher percentage of women in executive and professional occupations among the younger age cohorts. On the other hand, there has also been a

marked increase, or at least consistency, of women in all other white-collar (professional and semi-professional) and "pink-collar" (technical and service) occupations. Furthermore, the distribution of women by age category among both aggregated and specific occupations has little variation by age cohort.

The dramatic increase in women's labor force participation, coupled with the decline in men's participation rates, enabled some young women to pass through the doors into non-traditional occupations at the same time that most women were still entering the growing and traditionally female occupations.

Women's Earnings and the Sex-Based Wage Differential

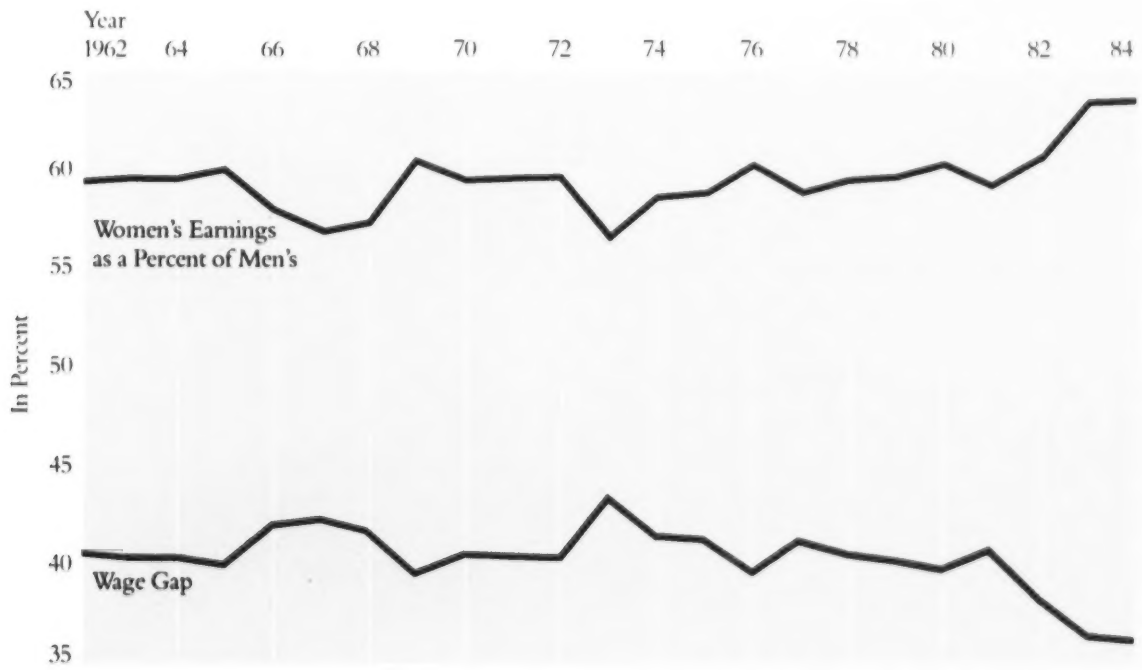
More and more women need to work outside of their homes for economic and personal reasons. At the same time, the U.S. economy is utilizing more of their energy in the work force. Are women's earnings (their economic position in the labor market) rising as quickly as their socioeconomic roles are changing? In this section, we explore how differences in women's and men's opportunities translate into a sex-based wage gap. Although the gap is declining, achievement of pay equity will require reshaping the structures which embody these different opportunities, rather than just altering women's career choices.

The Wage Gap Over the Life Cycle

According to the Bureau of Labor Statistics, between 1962 and 1984 women's annual earnings as a percent of men's ranged from a high of 63.7 percent in 1984 to a low of 57.8 percent in 1964. Figure 6 shows that over the past two decades there has been a slow decline in the wage gap, only 4.2 percent. The overall trend for the wage gap has been in the downward direction. Notice, however, that both the female-to-male earnings ratio and the sex-based wage gap have been subject to fluctuations over the 22 years measured.

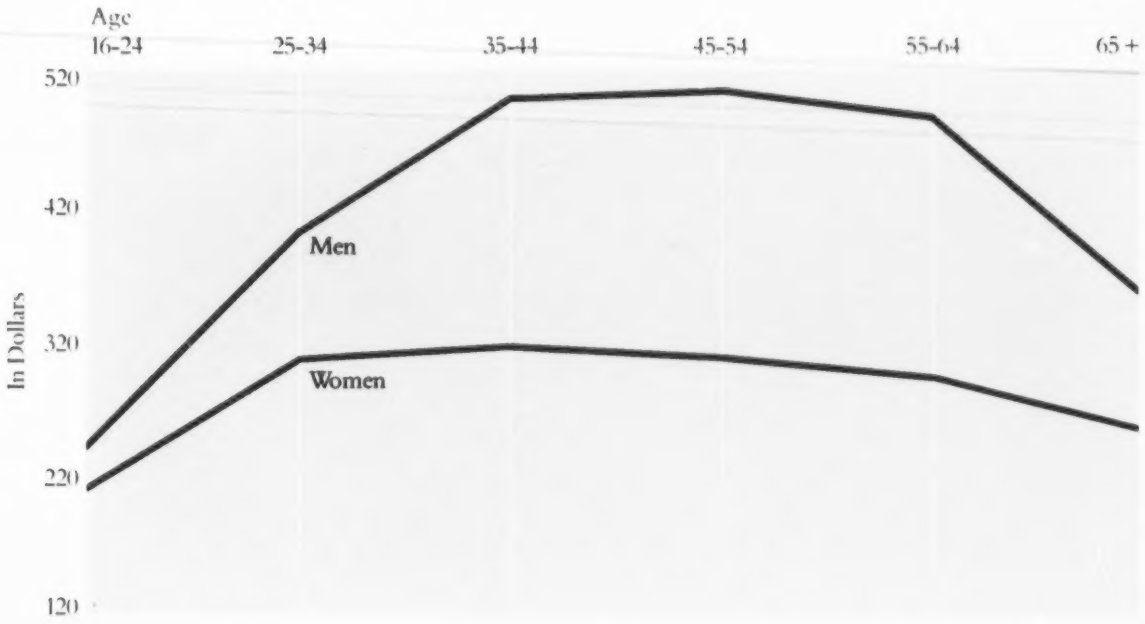
For instance, during the 1981–83 recession, and in 1984, the wage gap diminished. During this period, thousands of well-paying, male-dominated, manufacturing jobs were lost, many of them permanently. This has caused a decline in male earnings and labor force participation, narrowing the wage gap due to men's misfortunes rather than women's gains.

Figure 6
Women's Earnings as a Percent of Men's and the Wage Gap, 1962-1984



Note: Based upon median annual earnings of full-time workers aged 14 years and over working year-round.
Source: Janet L. Norwood, "Working Women and Public Policy," U.S. Department of Labor, Bureau of Labor Statistics, Report 710, August 1984, Table 3.

Figure 7
Median Weekly Earnings by Age and Sex, 1986



Note: For full-time workers.
Source: U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, January 1987, Table 61.

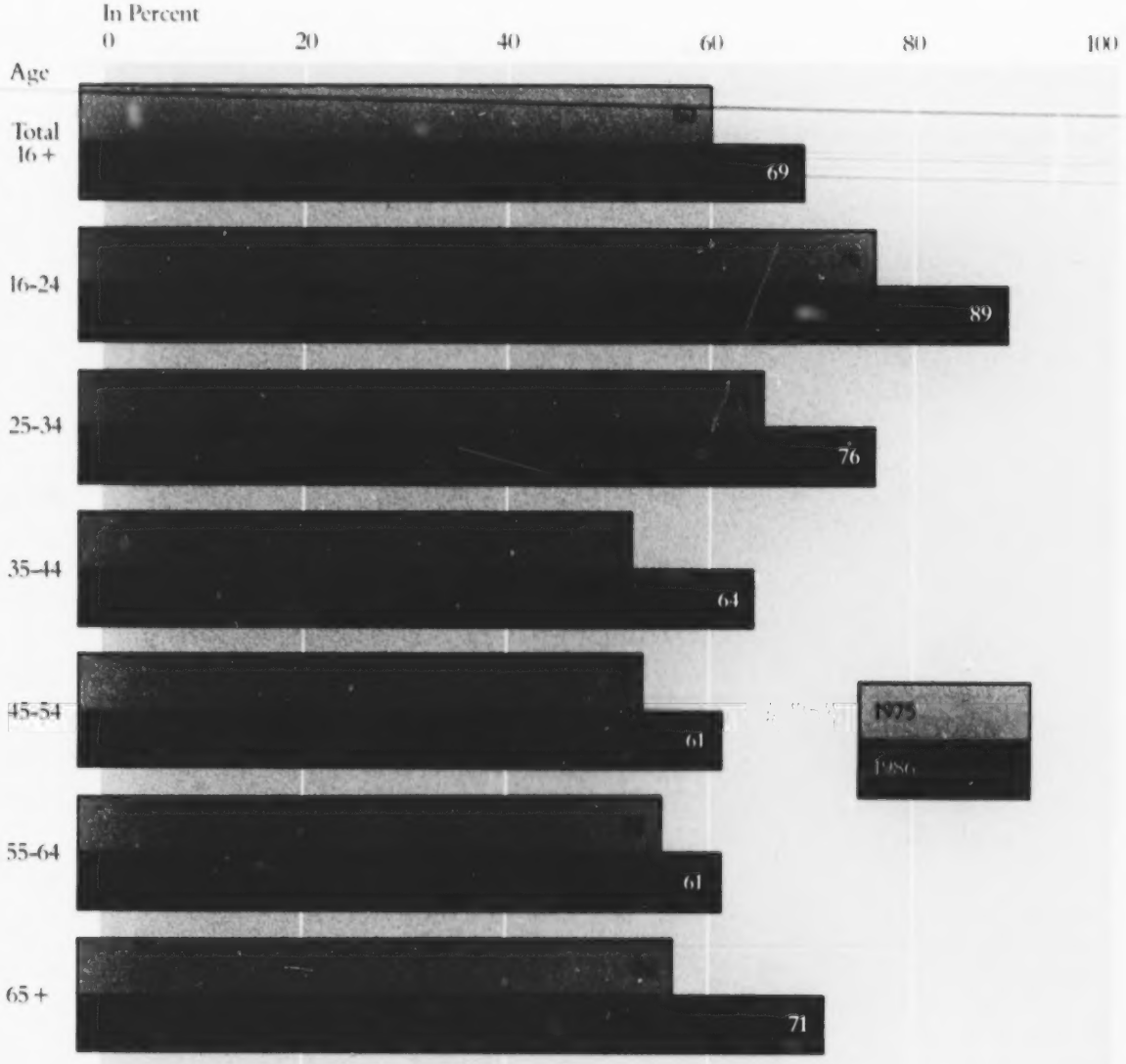
The sex-based wage differential, though, is not a constant over men's and women's life cycles. Figure 7 shows that for current workers the ratio of female-to-male median weekly earnings declines, or the wage gap rises with age. This reflects that, in general, men's earnings rise quicker and peak later, at ages 45–54 years. In contrast, women's earnings peak at ages 35–44 years and are relatively flat thereafter. The earnings gap is least for younger women and older women, aged 16–24 years and 65 years and over.[20] The remarkable difference in the slope or steepness of men's versus women's earnings paths from age 25 to age 64 suggests that during the prime earnings years, the opportunities afforded men and women in their careers are different.

Has it always been this way? Figure 8 (see page 27) provides a glimpse of age-earnings profiles over the past 11 years. In both 1975 and 1986, women's earnings as a percent of men's were greatest for the youngest and oldest age groups. Again, the prime earnings years marked the largest difference in earnings by sex. The earnings ratio *has* improved over the past decade. The greatest gains, however, were for the groups who already had the highest wage ratios. Women workers 16–24 years gained 13 percent and women workers 65 years and older gained 15 percent over the decade.

On behalf of their women members, unions in the 1980s have been successful at improving women's age-earnings profiles over the life cycle by bringing pay equity concerns to the bargaining table. This is represented in Figure 9 (see page 28). The gap between men's and women's weekly earnings is almost cut in half for union women versus nonunion women over their work lives. Furthermore, union and nonunion men in

Figure 8

Women's Earnings as a Percent of Men's by Age, 1975 and 1986

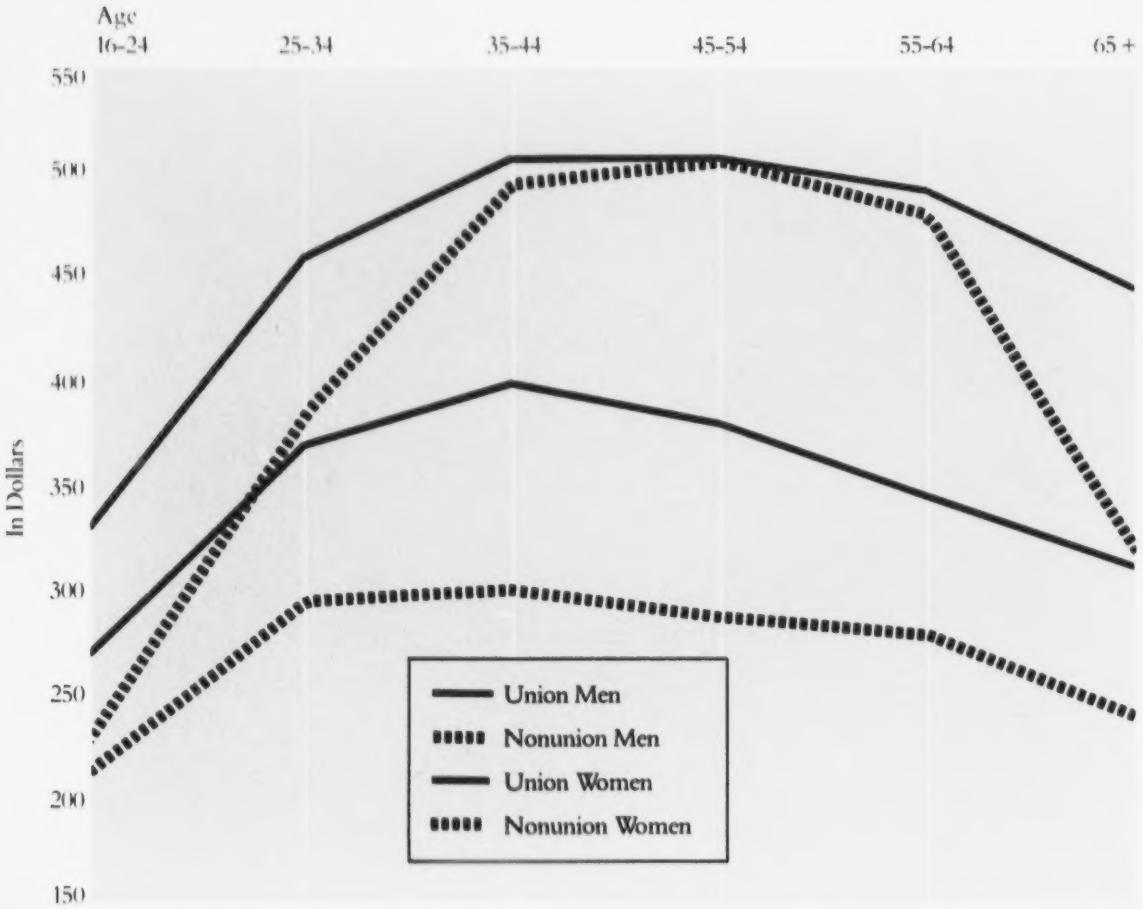


Note: Based on median weekly earnings for full-time workers.

Sources: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-60, No. 149, 1985; and U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, January 1987, Table 61.

Figure 9

Median Weekly Earnings for Full-Time Workers by Age, Sex, and Union Status, 1986 Annual Averages



Notes: Unionized means member of a union or employee association. The data for union women aged 65 and over is from 1985; 1986 data for this group is unavailable because the data set is less than 5,000.
Source: U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, January 1987, Table 61.

their prime earnings years of 45-54 have relatively equal median weekly earnings. The difference, then, in earnings based on union status is greater for older women than for men, suggesting that some collective bargaining approaches to pay inequities particularly help older women.

Earnings by Occupation

Women earned less than men in *all* the major categories denoted by the Bureau of Labor Statistics in 1986, except mechanics and repairers. Yet this subcategory employs only .06 percent of all working women. The highest female-to-male wage ratios are in: (1) several female-dominated occupational categories such as service workers, technicians, and administrative support occupations; (2) a few lower paid, male-dominated occupations such as farmers, handlers, and laborers; and (3) professional specialty occupations which contain the relatively well-

Table 6

Median Weekly Earnings of Full-Time Workers and the Female-To-Male Wage Ratio by Major Occupational Category, 1986

Occupation	Women	Men	Ratio	% Female
Managerial and professional specialty	**$414**	**$608**	**.68**	**43.6**
Executive, administrative, and managerial	395	620	.64	38.8
Professional specialty	428	599	.71	48.1
Technical, sales, and administrative support	**282**	**437**	**.65**	**62.7**
Technicians and related support	343	490	.70	43.4
Sales occupations	239	447	.53	40.9
Administrative support, including clerical	284	403	.70	78.1
Service occupations	**191**	**284**	**.67**	**50.5**
Private household	119	N/A	N/A	95.8
Protective service	292	402	.73	9.8
Other service occupations	195	239	.82	58.6
Precision production, craft, and repair	**277**	**418**	**.66**	**8.1**
Mechanics and repairers	431	413	1.04	3.7
Construction trades	333	401	.83	1.6
Other	258	448	.58	1.9
Operators, fabricators, and laborers	**225**	**332**	**.68**	**24.8**
Machine operators, assemblers, and inspectors	223	354	.63	39.3
Transportation and material moving	287	372	.77	5.2
Handlers, equipment cleaners, helpers, and laborers	226	271	.83	15.1
Farming, forestry, and fishing	**187**	**220**	**.85**	**10.6**

Note: Data are not available ("N/A") where the data base is less than 50,000 employed.
Source: U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, January 1987, Table 56.

paying female-dominated occupations of nursing, librarianship, and teaching.

However, once again it is difficult to generalize from aggregated occupational categories. For example, sales occupations have the lowest female-to-male ratio in Table 6, 53 percent. This is because women and men sell different products or services and occupy separate detailed occupations. Women predominate in retail and personal sales and earn less than male commodities and finance sales workers. Even at the retail level, men sell "big ticket" commission items such as electronics, recreational vehicles, and major household appliances while women sell less remunerative clothing, food products, and personal care products, usually for hourly wages. It is more useful to examine earnings differentials by detailed occupation.

When we do, we find that occupational segregation by sex is a key factor in the wage gap. Looking at Table 7 (see page 31), note that the rank of median earnings for 40 selected detailed occupations is generally inversely related to the percent female rank. In other words, the higher the median earnings (for both sexes) in a specific occupation, the lower the proportion of women in that job category.

The two major exceptions are the "female" professions of nursing and librarianship, which are in the top ten female-dominated occupations and the top half (though not the top ten) of the earnings rankings.

The bottom 15 jobs in earnings are overwhelmingly female-dominated, except for janitors and mail clerks which tend to employ a large number of minority men. These "bottom" jobs represent the expanding sectors of our economy: health services (technologists and technicians, nursing aides, orderlies, and attendants); food and hotel services (waiters and waitresses, hotel clerks and other information clerks); clerical (secretaries, typists, bookkeepers, receptionists, and other information clerks); and retail sales. These selected occupations also show us that newly evolving "high-tech" occupations are recreating the traditional hierarchies. Computer operators, roughly 70 percent female, are low-paid, $318 per week, while the male-dominated category of computer scientists and programmers are high-paid, $628 and $519 per week respectively.

The lowest wage differential among the 40 detailed occupations is for postal clerks, where women earn 96 percent of what men earn. (See Table 7.) Most likely, two factors account for this. First, these federal jobs have a much higher than average percent of minority occupants (29.9 percent versus 9.9 percent in the work force as a whole). The wage gap between black men and women is less than the gap between white men and women. It is also a unionized occupation; collective bargaining has virtually eliminated the wage gap and increased overall wages far above other administrative support, including clerical, occupations.[21]

With women's to men's wage ratios of .93 and .89 respectively, registered nurses and secretaries follow postal clerks in pay equity. These are the second and first ranked occupations in terms of percentage of females by occupation. Thus, male wage scales in female-dominated occupations are much closer to their female counterparts than women's are to men's in male-dominated occupations. For instance, the male-dominated category of securities and financial sales is in the top ten in rank of earnings, $608 per week, in the bottom ten in female representation, 24.19 percent, and has the lowest wage ratio, .57. (See Table 7.)

Thus far we have established that part of the reason for the sex-based wage differential is that men and women work in different detailed occupations. But what about those men and women who work in the same job for the same employer? Although equal pay for equal work has been law since the Equal Pay Act of 1963, for men and women in the same job level and establishment the wage gap narrows but doesn't close completely.

This finding was part of a larger study by Sieling which concluded that sex differences in earnings appear to be the result of not only differences in occupational choice, but in *advances* within narrowly defined job categories.[22] Although there is not 100 percent equal pay for equal work, there seems to be a more significant problem for women. Once they are in a particular occupation and work place, they are not moving ahead to the higher paying, upper levels of both male- and female-dominated occupations.

Sieling found that in many occupations studied (such as accountants, buyers, computer operators, and accounting clerks) more establishments pay women equitably at the lower, entry-level echelons of each occupation. Whereas 53 percent of establishments pay entry-level female accountants less than male accountants at the same level, the number jumps to 82 percent at the highest accountant level. For the lower paying female-dominated occupations of computer operator and accounting clerk, there is greater pay equity at all job levels. Studies such as this one indicate that pay equity differs in female- versus male-dominated occupations. Further-

Table 7

Rank of Weekly Earnings and Percent Female for 40 Detailed Occupations, 1986

Occupation	Median Earnings	Rank	% Female	Rank	Wage Ratio
Lawyers	$767	1	42.79	31	.77
Engineers	682	2	6.32	38	.84
Physicians	653	3	26.94	30	.69
Mathematical/computer scientists	628	4	36.22	27	.75
Education administrators	610	5	42.04	22	.72
Securities/financial services sales	608	6	24.19	32	.57
College/university teachers	600	7	27.54	29	.73
Financial managers	584	8	37.88	25	.65
Natural scientists	570	9	8.22	37	.78
Computer programmers	519	10	34.19	28	.85
Public administrators/officials	513	11	40.55	23	.67
Postal clerks	479	12	40.15	24	.96
Accountants and auditors	478	13	45.52	21	.72
Production supervisors	474	14	13.84	35	.60
Registered nurses	460	15	92.13	2	.93
Real estate sales	457	16	55.52	17	.75
Teachers, except college/university	437	17	71.01	13	.82
Precision metalworkers	432	18	5.57	39	.73
Librarians, archivists, curators	425	19	82.00	8	.77
Insurance sales	418	20	37.15	26	.70
Drafting	412	21	20.16	34	.81
Officer supervisors, general	404	22	66.83	15	.72
Construction trades	401	23	1.61	40	.83
Police and detectives	392	24	10.65	36	.73
Order clerks	366	25	70.69	14	.86
Health technologists/technicians	328	26	80.40	11	.78
Computer operators	318	27	53.35	29	.75
Telephone operators	315	28	86.74	7	.73
Bookkeepers	287	29	90.45	4	.83
Secretaries, stenographers, typists	287	29	98.33	1	.89
Mail clerks, except postal service	268	30	48.74	20	.85
Information clerks	255	31	89.49	5	.72
Janitors and cleaners	247	32	23.09	33	.79
Hand packers and packagers	233	33	62.61	16	.86
Bank tellers	231	34	90.63	3	.79
Retail/personal sales	215	35	57.82	17	.61
Personal services	212	36	72.94	12	.80
Nursing aides, orderlies, attendants	206	37	88.79	6	.80
Textile/apparel machine operators	195	38	80.52	10	.75
Waiters and waitresses	172	39	81.94	9	.80

Source: U.S. Department of Labor, Bureau of Labor Statistics, Unpublished tabulations from the Current Population Survey, 1986 annual averages.

more, the wage gap between men and women, even at the same workplace, is intensified by women's lack of access to the upper echelons of job ladders, especially in nontraditional occupations.

The Career Ladder Problem Faced by Women

Thus far we have seen that a major reason why women earn 69 cents for every dollar earned by a man is that they tend to work in different industries and different occupations. However, even when men and women are in the same occupation, men occupy most of the higher-paid positions. Women get stuck on the lower rungs of career ladders, while men are able to climb their way to the top.

The image of career ladders is a useful concept in analyzing all types of work settings. The ability to take on more responsibilities and therefore increase compensation is the common ingredient to all types of ladders, whether this involves working your way to a corner office with a view, from the night shift to day shift, or from the word processing pool to private secretary. In this section, the ladder problem faced by women is documented and some of the reasons for it are explored through case studies of particular occupations — both male- and female-dominated.

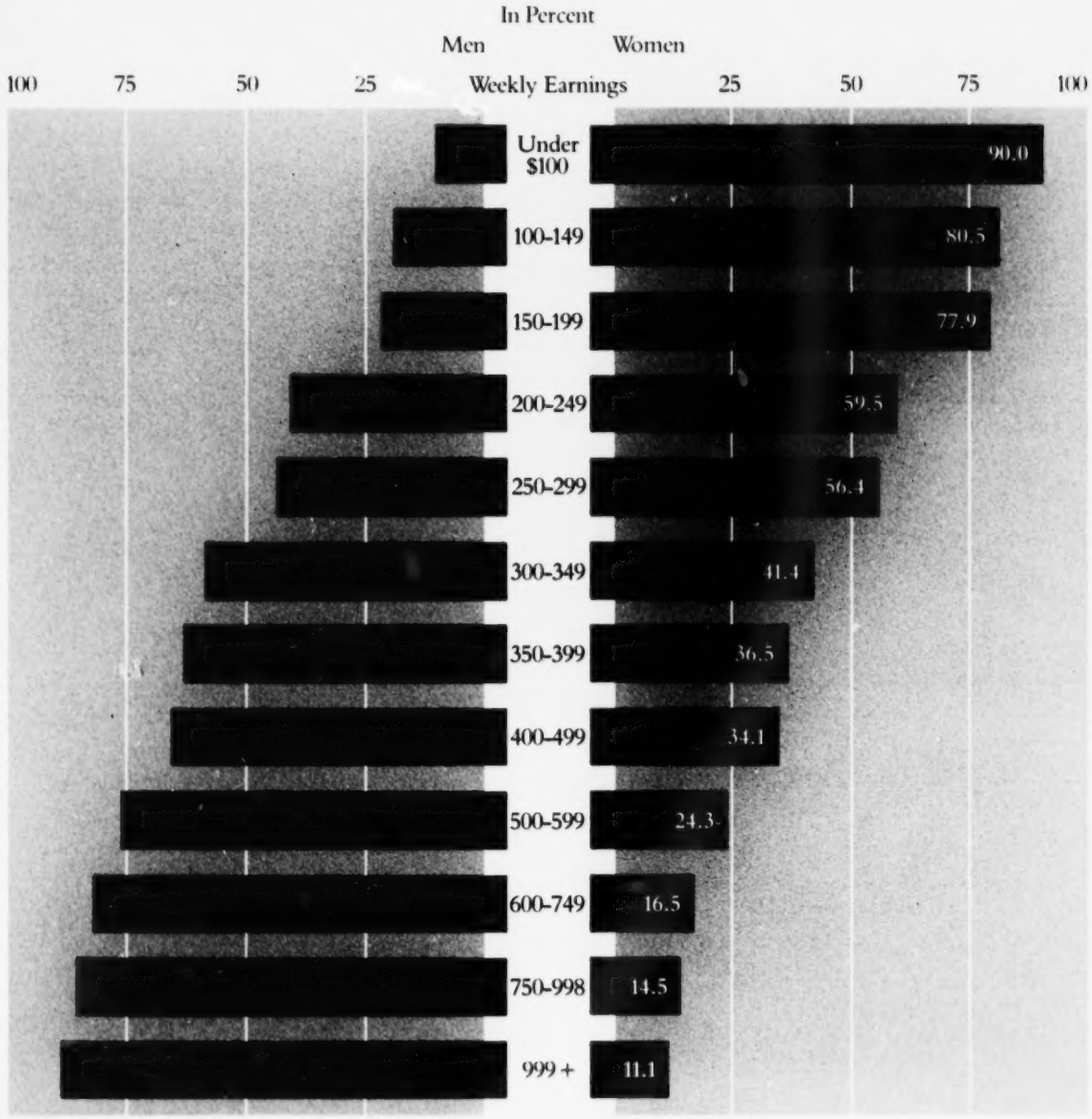
Figure 10 (see page 33) presents the distribution of full-time sales workers by sex and salary level for 1986. It is clear that as we move up the earnings ladder, the percentage of women falls. At the lowest rung, under $100 per week, women are 90 percent of all workers; in the highest rung, men hold just under 90 percent of the positions. In fact, women predominate at all salary levels up to $299 per week. Men predominate in all salary levels above $300 per week.

Even in a female-dominated occupation such as administrative support, men make up the majority in the highest salary levels. Nearly 60 percent of women in this occupational category earn between $200 and $349 per week while nearly 50 percent of men earn between $400 and $998 per week. No women clerical workers in 1986 were paid more than $749 per week, yet 6.8 percent of men were. The majority of these women workers, 56 percent, earn less than $299 per week. But 72.9 percent of men clerical workers earn more than this amount.[23]

The pattern described in these occupations exists not because women and men are always hired into these specific levels, but because they are hired into different "opportunity structures." The barriers women face involve more than initial hiring at the entry level; their opportunities to develop their careers are limited by expectations about women's roles which have become built into the process of moving up the rungs. Roos and Reskin identify four points at which women face institutionalized barriers to equal participation in the labor force: preemployment training, job access and assignment, job mobility, and retention. While the first two types of barriers occur in the competitive labor markets, the latter types occur in what is called an "internal labor market."[24]

An internal labor market distributes positions within a particular firm or work place. Its defining characteristics are (1) a job ladder is present, (2) entrance to the ladder is limited to the lowest level ("port of entry"), and (3) movement up the ladder involves "the progressive acquisition of job-related skills and knowledge."[25] Within male-dominated occupations, internal labor markets tend to be hierarchical, with ladders based upon on-the-job training, custom, as well as skill. Custom may deter employers from investing in on-the-job training for younger women, expecting them to quit when they have children. Therefore, women will not be hired into the entry-level positions on a ladder.[26] If younger women have such restricted access at the bottom, this begins the process which increases the gap between men's and women's earnings over the life cycle.

Figure 10
Percent Distribution of Sales Workers by Salary Level and Sex, 1986



Source: U.S. Department of Labor, Bureau of Labor Statistics, Unpublished Tabulations from the 1986 Current Population Survey.

In contrast, women do have access to training and various "ports of entry" in female-dominated occupations. The problem in this case, though, is that the job ladders dead end shortly beyond the entry level, or they are "phony" in the first place. Where legitimate ladders do exist, men are disproportionately given preference for promotion to the upper echelons.

Secretaries, for example, are considered to "advance" when their boss receives a promotion, not by their own skill enhancement or merit.[27] In the health industry, licensure requirements have structured separate training programs for nurses' aides, licensed practical nurses, and registered nurses. Experience as a nurse's aide will not give one credit toward becoming an LPN; an LPN must undergo a new training program to become a registered nurse.[28] These training structures interrupt what could be a steady career path from nurse's aide to head nurse. Finally, male registered nurses are promoted to administrative jobs more frequently than female RNs, despite the male's minority status in this occupation.[29]

Sex-segregated career tracking, promoting men and women with similar jobs along separate career lines can occur within the *same* occupation and the *same* work place. Bergmann, for example, has identified the occupational segregation by sex within an internal labor market of a large insurance company. Women were only hired as claims representatives and men as claims adjusters, both requiring a B.A. degree for entry. Women could advance to a "supervising claims representative" and then to "claims representative supervisor" but no further. Men, on the other hand, went directly from claims adjusters to "claims supervisors," one notch above a woman's highest level, and then right into management.[30]

Another example of tracking, but by department, establishment, or area of specialization is in the health professions. When women do become health administrators, they are assigned to less prestigious personnel and housekeeping departments.[31] Also, women physicians are more likely to find salaried employment than to own their own practice; 26 percent of women physicians but only eight percent of male physicians work in clinics, student health centers, government agencies, and other alternatives to private or group practice.[32] Finally, a male-dominated speciality such as surgery pays substantially more than pediatrics, nutrition, and anesthesiology, specialties which contain a large percentage of women.[33]

Even though women have made inroads into white-collar male bastions, these professions themselves are changing. Economic pressures including worldwide competition in manufacturing have transformed the service sector into the most dynamic area of the U.S. economy. With this exponential growth has come a focus on cost containment to meet the global demands of the 1980s. One result has been the restructuring of jobs and work places. More and more professional jobs are located in larger, impersonal organizations where pay scales are lower and opportunities for career development are fewer. Women graduates in the professions are employed precisely in those work places and specializations affected by the restructuring and, therefore, where ladders are shortest.[34]

Women's experience in the legal professions is indicative of this problem. A 1972 court ruling allowing lawyers to advertise enabled entrepreneurs in the profession to develop another profitable type of service. Legal clinics sprouted up across the country, offering consumers cheaper access to legal services; but they offered lawyers poorer working conditions and fewer opportunities for advancement than traditional firms. Preliminary data suggests that women are overrepresented in such work settings, precisely after they tripled their representation in the legal profession.[35]

In academia, Patterson and Engleberg found that women were stuck in temporary lecturer positions and the bottom ranks of tenure tracks. In the mid-1970s, 67 percent of women versus 40 percent of men were in the lowest three positions on the academic job ladder; women were severely underrepresented among tenured faculty.[36] Further, women have entered academia in greater numbers at a time of declining enrollments in four-year private colleges and universities. The problem they face is that once they accept jobs in the blossoming two-year institutions, heavy teaching assignments and little support for writing and publishing often prevent them from ever returning to the prestigious institutions.[37]

This type of tracking in the professions exemplifies types of barriers women face early in their careers which can determine their future earnings and advancement potential in their later years. Conclusions we can draw from these studies and this analysis are: (1) the importance of studying the distribution of men and women within occupations; (2) the crucial role played by establishments rather than individuals as decision-making units; and (3) the significance of rules, precedent, external forces, and other institutionalized constraints in the decisions of employers and employees.[38] Internal labor market theory can be a useful tool to analyze the extent to which women are segregated into low-paying jobs as well as the extent to which women are employed in upwardly mobile jobs. We have seen here that segregation at the entry level and career tracking in the internal labor market has severely restricted women's opportunities for advancement early in their work lives and later in their careers. This occurs in both female- and male-dominated occupations. Hence, a primary reason why women in their prime earnings years of 45-54 still earn 61 cents for every dollar a man earns in the work place is the existence of structured mobility ladders. When career paths are established and replicated in this way, it is difficult to prove overt discrimination by age or sex.

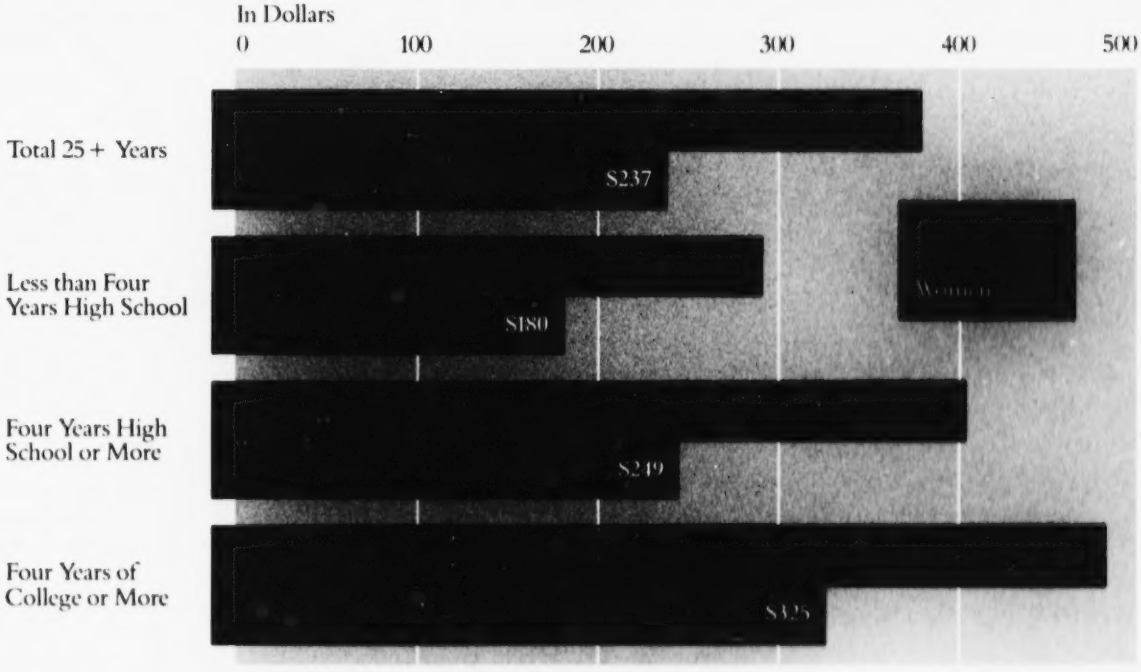
Human Capital and Women's Earnings

The previous section pointed out that employers are often reluctant to hire women into jobs offering extensive on-the-job training, with possibilities for upward progression, fearing that family responsibilities will pull women out of the full-time labor force. Economists and employers view education, training, experience, and job tenure as investments in "human capital." That is, these investments improve a worker's productivity, just as physical capital (a new machine, for instance) enables an increase in output per worker. In the labor market, it is common practice that workers are paid according to their productivity, or their human capital characteristics.

Women are presumed, as a group, to have less human capital than men in the same age category. It is also hypothesized by human capital theorists that women *choose* female-dominated occupations, which pay less than male-dominated occupations, because they plan to spend time moving in and out of the labor market. Women's jobs are considered to be more conducive to such intermittent behavior, giving women the freedom to enter and exit from, say teaching, nursing, or clerical work, easily, without having the penalty of high retraining costs. This is a commonly used explanation of the wage gap between men and women.

Is this true? First, most studies of male and female workers having the same amounts of education or work experience continue to find very large, unexplained differences between men's and women's earnings.[39] Further, most data do not show that women are penalized less for time out of the labor force in female-dominated occupations; there is no evidence that plans for intermittency would make it rational to "choose" female-dominated occu-

Figure 11
Median Weekly Earnings by Sex and Level of Education for Persons 25 Years and Over, 1981



Source: Earl F Mellor and George D. Stamas, "Usual Weekly Earnings: Another Look at Intergroup Differences and Basic Trends," *Monthly Labor Review,* vol. 105(4), April 1982, Table 1.

pations. After all, why not maximize one's earnings over the life cycle?

Finally, more education does not necessarily bring the same monetary returns to women in the labor market as it does for men. As Figure 11 shows, a woman with four years of college earns less than a man with a high school diploma and only slightly more than a male high school dropout. The spread between men's and women's median weekly earnings worsens as the level of education increases. The difference for high school drop outs is $110 per week, while the difference for those with four or more years of college is $157 per week. Women college graduates earn 67 percent of what men college graduates earn ($325 versus $482), an increase of only five percent over lower education levels. (See Figure 11.) In the last 15 years, women's college enrollments have increased while men's have decreased. Over one out of five white men 25 years or older has at least four years of a college education. Nearly one out of seven white women and one out of 12 black women also have at least four years of college. However, for reasons of personal preference, inducement by preconceptions, or lack of equal access, women still pursue different and less lucrative college majors than their male counterparts. In 1978, only 12 percent of engineering majors were women. On the other hand, 77 percent of education majors and 56 percent of humanities majors were women.[40]

Occupational tenure with the same employer, another measure of human capital, is less for women than for men, but this gap has also been narrowing for over two decades, as shown in Table 8 (see page 37). The gap between women's and men's tenure has

Table 8
Median Years With Current Employer by Sex and Age, Selected Years

	1963	1973	1983
Total 16+ years			
Men	5.7	4.6	5.1
Women	3.0	2.8	3.7
Difference	2.7	1.8	1.4
25-34 years			
Men	3.5	3.2	3.8
Women	2.0	2.2	3.2
Difference	1.5	1.0	.6
35-44 years			
Men	7.6	6.7	7.7
Women	3.6	3.6	4.6
Difference	4.0	3.1	3.1
45-54 years			
Men	11.4	11.5	13.2
Women	6.1	5.9	6.9
Difference	5.3	5.6	6.3

Sources: June O'Neill, "The Trend in the Male-Female Wage Gap in the United States," *Journal of Labor Economics*, vol. 3, no. 1, January 1985, Table 6; and U.S. Department of Labor, Bureau of Labor Statistics, Unpublished tabulations from the 1983 Current Population Survey, Table 1.

dropped from 2.7 years in 1963, to 1.8 years in 1973, and finally 1.4 years in 1983. The reduction from 1963 to 1983 was equal, 0.9 years, for women aged 25-34 and 35-44.

However, in a January 1983 job tenure survey by the Bureau of Labor Statistics, there were small tenure differences between women and men under the age of 30.[41] Table 8 shows that for women aged 25-34, the median tenure is 3.8 years; for men in this age group the figure is 3.2 years, a difference of less than one year. The real differences occur after age 35.

Even with the same number of years of education and experience, it has been documented that men receive a higher rate of return on their human capital. But we have seen that the different rates of return can be explained by the amount of job tenure with a current employer, by time spent in on-the-job training for one's current position, and by some unmeasurable characteristic such as different opportunities afforded men and women throughout their work lives. Therefore, if women do not have access to on-the-job training, as mentioned in the previous section, women could have the same number of years of experience, and *even* years of tenure with a specific employer, but would still receive less pay. Without equal access to ports of entry into a particular career, women will not be *allowed* to build up their human capital. To achieve pay equity, women need the opportunity to participate in the selection and then the promotional practices of internal labor markets to have a chance at legitimate, high-quality, career ladders with many rungs.

Occupational and Employment Projections for the Future

Using models based upon several assumptions, the Bureau of Labor Statistics has developed alternative scenarios to project what kind of industries and jobs will grow in the future. The BLS has also projected who might be in those "jobs for the future." Some of their projections will be discussed in this section as they pertain to women, especially older women.

First, 90 percent of jobs created between 1984 and 1995 are projected to be in the service sector. All but two of the top ten industries which are anticipated to have the greatest annual rates of growth in employment are in the service sector. These industries and their projected average annual growth rates are in Table 9 (see page 37). Medical services is expected to be the industry with the highest annual rate of change in employment, 4.3 percent. Business services, number two in rate of growth in employment, is projected to be number one in the increase in absolute number of job occupants from 1984 to 1995.[42]

It is expected that the manufacturing sector's share of total employment will continue to steadily decline, and corresponding to it will be a rise in the service sector's share of total employment in the U.S. economy. The most job losses in manufacturing will be in cotton, leather, and wood products.[43] Declines in cotton and leather products will affect many female-dominated jobs in apparel production, jobs between 70 and 90 percent female in 1986.[44] Additionally, unlike the rapid rise during 1973-84, the rate of increase of administrative support jobs is expected to slow due to office automation.

Table 10 shows that employment in administrative support, including clerical occupations grew at a 24.7 percentage rate from 1973-84; from 1984-95, the rate of growth is expected to be only 9.5 percent, less than the average for all occupations and number seven in the top ten listing. As in the earlier period, the fastest growing occupation

Table 9

Projected Changes in Employment for Fastest Growing Industries, 1984-1995

Industry	Average Annual Rate of Growth
Medical services	4.3
Business services	4.2
Computers and peripheral equipment	3.7
Materials handling equipment	3.7
Transportation services	3.5
Professional services, not elsewhere classified	3.5
Scientific and controlling instruments	2.9
Medical instruments and supplies	2.8
Doctors' and dentists' services	2.6
Plastics products	2.5

Source: U.S. Department of Labor, Bureau of Labor Statistics, *News*, November 7, 1985, Table 2.

Table 10

Actual and Projected Percentage Growth in Employment by Major Occupation

Occupational Groups	1973-84	1984-1995
All Occupations	**23.4**	**14.9**
Technicians and related support	58.3	28.7
Executive, administrative, and managerial	48.4	22.1
Professional	46.2	21.7
Service, except private household	37.6	21.3
Sales	41.5	19.9
Precision production, craft, and repair	20.2	11.7
Administrative support, including clerical	24.7	9.5
Operators, fabricators, and laborers	−7.2	7.3
Farming, forestry, and fishing	−5.9	−3.0
Private household	−27.0	−18.3

Source: U.S. Department of Labor, Bureau of Labor Statistics, *News*, November 7, 1985, Table 3.

Table 11

Thirty Occupations With the Largest Projected Absolute Growth, 1984–1995

Occupation	Change in Employment *(numbers in thousands)*	% Female in 1986
Cashiers	556	82.9
Registered nurses	452	94.3
Janitors and cleaners, including maids/housekeeping	443	42.7
Food preparation workers, including fast food	434	N/A
Truck drivers	428	4.3
Waiters and waitresses	424	85.1
Wholesale trade sales workers	369	N/A
Nursing aides, orderlies, and attendants	348	90.5
Retail sales persons	343	68.6
Accountants and auditors	307	44.9
Teachers, kindergarten/elementary	281	88.0
Secretaries	268	99.0
Computer programmers	254	34.0
General office clerks	231	80.5
Computer systems analysts	212	34.4
Electrical and electronic engineers	206	6.9
Electrical and electronic technicians/technologists	202	12.6
Guards	188	18.4
Automotive and motorcycle mechanics	185	1.0
Lawyers	175	18.0
Cosmetologists and related workers	150	88.8
Cooks, restaurant	138	50.6
Maintenance repairers, general utility	137	N/A
Bookkeeping, accounting, and auditing clerks	118	91.8
Bartenders	112	48.8
Computer operators, excluding peripheral	111	68.8
Physicians and surgeons	109	17.6
Licensed practical nurses	106	97.5
Carpenters	101	1.4
Switchboard operators	100	87.4

Note: Because of differences in occupational categories, the percentage female was not available for several occupations, designated "N/A."

Sources: U.S. Department of Labor, Bureau of Labor Statistics, *News*, November 7, 1985, Table 4; and U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, January 1987, Table 22.

in percentage terms is projected to be technicians, due to the expected growth rates in the top three industries in Table 9, which need technicians. The employment growth for executives, professionals, service workers, and sales workers is also expected to be greater than the 14.9 percent average for all major occupations.

Table 11 (see page 38) presents the thirty *specific* occupations where the largest numbers of new jobs are being created, based upon the size of the occupation and its projected growth rate. Eleven of these occupations are more than 80 percent female. Only eight are more than 80 percent male. While this probably means a high demand for women workers, many of these occupations tend to be lower in pay than the primarily unionized, blue-collar manufacturing jobs they are replacing. Only two of the top ten occupations in Table 11 pay median salaries over $400 per week; six pay under $250 per week.[45] Some analysts, in fact, have argued that we are facing a "declining middle" phenomenon: jobs at both the top and the bottom of the salary scale are expanding, while middle-range jobs disappear.

There will be well paying professional and managerial jobs in the next decade (computer programmers, computer system analysts, electronic engineers, accountants and auditors, lawyers, and physicians, for instance). Women need to prepare themselves to enter the fields at the top. They may also need retraining and job placement for these high-paying, emerging fields.

If however, as today, many opportunity doors are closed to women at an early age, the lack of opportunities will worsen for them over the life cycle, especially in their prime earnings years of 35-54. The key is to allow women the opportunity to the ports of entry in better paying occupations. Equally important, considering the predominantly female, low-paying jobs listed in Table 11, is to provide women with career ladders and chances for upward mobility throughout their work lives.

Both our population and our labor force in the U.S. are aging. Furthermore, the Bureau of Labor Statistics projects that women will have a much larger increase in labor force growth than men — over twice as high for all age categories.[46] Since older women will constitute an increasing percentage of the labor force between now and the end of the century, and because industries and occupations in which women are segregated are expected to have the most growth, we need to be concerned about opening doors for women now, to best improve their chances in their later earnings years. Thus, there is a resurgent need for public policies addressing the concerns of mature working women. The next section will focus on the policy implications of the statistical and theoretical analyses in this paper.

Summary and Public Policy Implications

The data and the studies reviewed in the previous four sections of the paper demonstrate that the wage gap between women and men has not declined significantly despite increases in women's education, labor force participation rates, and job tenure. Although younger age cohorts evidence some new movement into nontraditional fields, their progress has not substantially outpaced that of their elders. Moreover, the pattern of the sex-based wage gap over the life cycle has *always* been narrowest for youngest age cohorts and widest during middle age. At all age levels, only a minority of working women have had access to highly mobile, well-paying careers.

Human capital theory alone, which focuses on individual characteristics and the changing choices of younger women, at best explains about half of the wage gap. Even when women augment their human capital, it does not yield the same return compared to men. Human capital theory thus fails to explain why the wage gap has persisted in the 40 percent range for over 30 years. Therefore, it will not be enough for society to wait for a generation of "superwomen" to mature in order to solve the employment problems of older women.

Women have made gains in obtaining equal pay for equal work when they work side by side with men, in the same job in the same work site. What is a more common occurrence in labor markets, though, is that work isn't equal. Men and women are segregated either by occupation, job, department, or specialty, when working for the same employer. Or, women and men are working in the same job, occupation, or specialty, and are segregated by establishment or employer. When men and women are not working side by side, we have seen that many male-dominated occupations pay more than many female-dominated occupations.

Sex segregation by industry and occupation has not declined dramatically and shows no sign of disappearing. Although women, especially younger women, have made some advances into professional and managerial occupations, the majority of women in all age groups still work in female-dominated occupations and specialties. Older women in the future, just as older women today, are likely to face narrowing options in both male- and female-dominated occupations and specialties as they try to reap benefits from their increased commitment to the labor force and from their greater job tenure.

It was argued that segregation takes its most pernicious shape within occupations, resulting in two different kinds of mobility or ladder problems for women. This has implications for older women workers' abilities to keep their increases in pay on a par with men's as they age. Internal labor market theory was the lens used to describe and analyze these problems. First, the wage gap is higher in male-dominated occupations because there is an intricate system of career ladder rungs within these occupations and barriers hinder women's entry at the bottom ports of entry. Second, in female-dominated occupations there are ladders, but they are shorter and dead-end sooner. The pay gap between men and women is generally less in these female-dominated occupations, yet men tend to disproportionately secure the highest rungs on these female ladders. Even when employers hire both men and women into similar occupations at the port of entry, beyond the entry level different paths for advancement are created, so women may "top out" earlier in their careers, widening the wage gap to its peak between women and their male coworkers during the ages from 45 through 64.

Given the predicted expansion of traditionally female occupations and the expected continued influx of women in the labor force, the problems of working women will be increasingly critical to the health of the U.S. economy as a whole. Thus, it is in society's

interest to develop public policies to alleviate the inequities in our current labor market.

Some argue that active public policy measures are not necessary. If women continue to augment their human capital, if women continue to choose to train for and enter better paying professions, and if women's tenure continues to increase, competitive factors in the labor market will force employers to pay women on a par with men. However, we have already shown that the rewards for augmented human capital and increased experience do not carry the same premium for women as men. Thus, the sexes are not treated equally in competitive labor markets. Furthermore, the competitive labor market, which facilitates wage movements and entry to and exits from jobs, doesn't always work as promised. There has been a considerable shortage of nurses in the past few years, and even clerical workers. Nevertheless, there is resistence in these female-dominated occupations to an increase in wages sufficient to attract new entrants into these professions.

Supply and demand analysis fails us here because important decisions about hiring, pay, and promotions are often made in internal labor markets, not in competitive, external markets. Market imperfections and extra-market phenomena, as in the case of nurses, often justify a role for public policy. But what kinds of public policies might be effective in dealing with the problems laid out here?

Continued affirmative action in hiring and promotions is essential to give women access to career ladders in male-dominated occupations. Recent victories by women in cases argued before the Supreme Court of the United States are auspicious. Affirmative action, unfortunately, is often a slow, case by case remedy to economy-wide, and often covert, discrimination.

Access, at least at the entry level, is not the problem in female-dominated occupations. Therefore, a different approach than affirmative action is needed. "Comparable worth" is such an approach. It is based upon job evaluation, which rates the compensable factors of skill, effort, responsibility, and working conditions, for various male and female jobs in an establishment.

Comparable worth advocates argue that female-dominated occupations have been devalued simply because the work is done by women. Remedies do not have to ascertain some innate, magical value of a particular job, but they should eradicate discriminatory pay *patterns* within an establishment. The goal is to achieve equal pay for jobs of comparable *value or worth*. Opponents point to a whole host of both measurement and enforcement problems. These have been well documented and debated in government, academia, and in business and will not be reviewed here.

Comparable worth based on raising entry-level or average wages for a particular female-dominated occupation may solve the problem of low pay for women workers of all ages in the short run. But it will not by itself eliminate all of the wage gap in the long run. A complementary policy approach for women beyond the entry level who are not beginning their careers is job restructuring. Job restructuring helps deal with the problem of access for women over the life cycle, more so than comparable worth, and can lead to greater monetary rewards for older women.

Job restructuring basically means incorporating new duties and responsibilities into dead-end positions that will enable the occupants to prepare for and later be promoted to a higher-level (and better paying) job. Oftentimes women in the work place take on new duties and responsibilities, with new technology at their work stations for example, but their new skills are not rewarded or explicitly recognized as a possible move to the next rung of a career ladder. Job restructuring recognizes these skill enhancements as a new position and rewards them accordingly. Alternatively, we can create a brand

new job which combines skills from lower and higher levels, which forms a "bridge" between two seemingly unconnected jobs. This could provide possibilities for further progression into the next rung or rungs on the ladder which may have been previously inaccessible from the woman employee's former position, or for progression into rungs of a related or parallel career ladder also inaccessible without some sort of bridge.

In female-dominated occupations, comparable worth coupled with job restructuring can raise entry-level wages *and* develop lines of promotion and bridges between levels of responsibility, addressing the problems of younger and older women alike. Similarly, affirmative action policies in traditionally male occupations can assist and have assisted younger women entering the work force out of high school or college. But it should be possible to expand traditional goals and timetables to help re-entrants into the labor force and help other older women enter new fields.

Likewise, employment training programs, both on-the-job and publicly funded, need to be expanded to meet the needs of both groups. Younger women, especially those heading households, need publicly funded training programs to alleviate the growing poverty of female-headed families. "Displaced homemakers" (mostly widowed or divorced homemakers who lose their primary means of support) and other older women who reenter the work force need training programs that update their skills in changing occupations or teach them new skills in emerging fields rather than dead-end ones.

Policies which support working women in their dual roles at home and work can also cut across the life cycle. While child care facilities and parental leave policies target the needs of women in their child-bearing and child-rearing years, mature women are also becoming aware of the importance of dependent care. Many women in the middle stages of their work lives are responsible for the care of elderly parents. Public policies are needed which ensure that society as a whole helps support all working women with dependents needing care.

How can these policies be achieved? First, aggressive and timely government enforcement of existing equal pay, affirmative action, and other employment discrimination laws is imperative. Society's commitment to pay equity is written into our current laws. However, enforcement of the statutes is often slow and limited to new hires.

Second, comparable worth studies are being conducted and sometimes implemented on a case by case basis, mostly in the public sector. More formal and informal studies are needed. If a pay system is found to be discriminatory, it can be redressed voluntarily, through bargaining or through legal action. Since the public sector has taken much of the lead in this area, perhaps it should serve as a role model for remedying discriminatory pay scales.

Much of the early initiative in bringing law suits or asking for job evaluation studies has come from employees represented by labor unions. In fact, unions have bargained for labor-management cooperation in developing job restructuring programs which target female-dominated dead-end occupations. Again, the public sector has taken the lead here; revisions in predominantly female occupational titles in the New York Civil Service is one notable example.[47]

The strength of unions and other collective bargaining agents is their ability to focus on specific work places and establishments. However, educating society to women's changing roles, sensitizing employers to women's concerns, pressuring government officials to enforce existing regulations, and lobbying for new legislation when needed, are best achieved by coalitions of all those affected by employment and wage discrimination. Such coalitions could include women's organizations, civil rights groups,

employee associations, and advocates for older workers.

Many state governments have developed new approaches to the problems women face by, for example, linking support for low-income women to employment and training programs. States such as Massachusetts provide money for child care and transportation while women train for occupations. Policies linking low-income support, employment training and retraining, child and dependent care, and affirmative action require government at the federal, state, and local levels to act as a coordinator with the private sector.

Advocating pay equity is, thus, a multi-faceted process. It means fighting for equal access to all levels of all occupations as well as reevaluating the way we reward work traditionally done by women. It encompasses a concern about the types of jobs being created in a changing economy, and the types of jobs being lost. It means developing policies for women who are not presently employed, but who would like to be. Finally, pay equity must be concerned with all stages of workers' life cycles, recognizing that each stage of life creates possibilities and limitations for the succeeding stages. As a society we have become committed to the idea of equality; our next step is to ensure its implementation via the combination of approaches suggested here.

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